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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,660	12/28/2000	Behrang Behin	ONX-105	8890
27652	7590	04/15/2004	EXAMINER	
JOSHUA D. ISENBERG 204 CASTRO LANE FREMONT, CA 94539			ROJAS, OMAR R	
			ART UNIT	PAPER NUMBER
			2874	
DATE MAILED: 04/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/751,660

**Applicant(s)**

BEHIN ET AL.

**Examiner**

Omar Rojas

**Art Unit**

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-36 is/are allowed.
- 6) ☒ Claim(s) 37-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. With regards to the amendment filed on January 14, 2004, all the requested changes to the claims have been entered.

### ***Response to Arguments***

2. Applicant's arguments filed January 14, 2004 with regards to claims 1-36 have been fully considered. In view of the amendments to claims 1 and 23 and further in view of applicant's remarks, claims 1-36 have been indicated as allowable.

3. Applicant's arguments filed January 14, 2004 with regards to claims 37-51 have been fully considered but they are not persuasive. The examiner considers the Solgaard and Yamata references to be combinable for the reasons set forth below.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Solgaard clearly teaches the criticality of the mirror deflection angle to his invention. See Solgaard at column 4, lines 37-56. As mentioned in the previous Office action (see Paragraph 6), the ordinary skilled artisan would have sought to use the 2-D scanner of Yamada to control the mirror arrays (48) in Solgaard because Yamada provides "a large [mirror]

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deflection angle with a low applied voltage.” See Yamada at column 2, lines 46-48 and column 10, lines 48-59. Thus, the ordinary skilled artisan would have easily recognized that Yamada provides a benefit to the invention of Solgaard because of Yamada’s large mirror deflection angles and low voltage consumption.

Therefore, the previous rejection of claims 37-51 is maintained and repeated below.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**5. Claims 37-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,097,859 to Solgaard et al. (“Solgaard”) in view of U.S. Patent No. 5,959,760 to Yamada et al. (“Yamada”).**

Regarding claims 37-51, Solgaard discloses a fiber-optic switch (10) comprising: an array of input optical fibers (14); one or more arrays of mirrors (48); an array of output fibers (24); and microlenses (26, 32).

Solgaard does not appear to expressly disclose the same type of two-dimensional scanner as recited by claims 37-51.

Yamada, as discussed in the previous Office action mailed October 20, 2003, discloses basically the same type of two-dimensional (“2-D”) scanner recited by claims 37-51. See section 3 of the previous Office action. The limitations of claims 37-51 not expressly disclosed by Yamada or Solgaard have further been shown to be obvious design choices in view of Yamada. See section 5 of the previous Office action.

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The ordinary skilled artisan would have sought to use the 2-D scanner of Yamada to control the mirror arrays (48) in Solgaard because Yamada provides "a large [mirror] deflection angle with a low applied voltage." See Yamada at col. 2, ll. 46-48. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to modify Solgaard in view of Yamada to obtain the invention specified by claims 37-51.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Rojas whose telephone number is (571) 272-2357 and whose e-mail address is *omar.rojas@uspto.gov*. The examiner can normally be reached on Monday-Friday (7:00AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hemang Sanghavi, can be reached on (571) 272-2358. The central facsimile number for regular and After Final communications is (703) 872-9306. The examiner's RightFAX number is (571) 273-2357.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Omar Rojas  
Patent Examiner  
Art Unit 2874

or  
April 7, 2004

  
HEMANG SANGHAVI  
PRIMARY EXAMINER